

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD.
and SAMSUNG ELECTRONICS
AMERICA, INC.,

Defendants.

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CIVIL ACTION NO. 2:22-CV-00422-JRG-RSP

MEMORANDUM ORDER

Before the Court are Samsung's Daubert Motion and Motion to Strike Expert testimony of Dr. Andreas Groehn (Dkt. No. 251) and Daubert Motion and Motion to Strike Expert Testimony of Mr. David Kennedy. (Dkt. No. 252).

I. BACKGROUND

In proving its damages case, Headwater uses three experts, Dr. Wesel, Dr. Groehn, and Mr. Kennedy.

Dr. Wesel performed an infringement analysis of Samsung's devices and analyzed the impact of the allegedly infringing instrumentalities on battery life. Dr. Wesel further performed¹ battery testing on Samsung devices running the accused instrumentalities to determine the precise impact on battery life while performing different tasks.

Dr. Groehn was tasked with determining how customers value battery life in Samsung devices and performed a conjoint survey and analysis. Dr. Groehn's conjoint survey and analysis determined the relative interest of consumers in various different features in an attempt to determine the market value of

¹ Samsung complains that Dr. Wesel did not actually perform the testing nor did he adequately supervise the testing such that the results are reliable. As provided in a separate order, the Court does not find this is sufficient ground to strike such opinions. Dkt. No. 431.

battery life.

Mr. Kennedy brings both expert opinions together to obtain a final number. Based on Dr. Wesel's opinions, Mr. Kennedy applies the valuation by Dr. Groehn of the battery life feature to the volume of Samsung's sales to reach a damages number. Mr. Kennedy further analyzes other *Georgia-Pacific* factors to opine on his damages valuation.

Notably, both Dr. Groehn and Mr. Kennedy served corrected reports. These reports purported to correct a clerical error in Dr. Groehn's conjoint analysis that ultimately increased Mr. Kennedy's damages valuation by more than \$1 billion. The Court already ruled that Headwater would not be restricted to the original reports and Samsung would not be precluded from introducing this error and correction to the jury while cross-examining the experts.

II. APPLICABLE LAW

An expert witness may provide opinion testimony if “(a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.” Fed. R. Evid. 702.

Rule 702 requires a district court to make a preliminary determination, when requested, as to whether the requirements of the rule are satisfied with regard to a particular expert’s proposed testimony. *See Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149 (1999); *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 592-93 (1993). District courts are accorded broad discretion in making Rule 702 determinations of admissibility. *Kumho Tire*, 526 U.S. at 152 (“the trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable”). Although the Fifth Circuit and other courts have identified various factors that the district court may consider in determining whether an expert’s testimony should be admitted, the nature of the factors that

are appropriate for the court to consider is dictated by the ultimate inquiry—whether the expert’s testimony is sufficiently reliable and relevant to be helpful to the finder of fact and thus to warrant admission at trial. *United States v. Valencia*, 600 F.3d 389, 424 (5th Cir. 2010).

Importantly, in a jury trial setting, the Court’s role under *Daubert* is not to weigh the expert testimony to the point of supplanting the jury’s fact-finding role; instead, the Court’s role is limited to that of a gatekeeper, ensuring that the evidence in dispute is at least sufficiently reliable and relevant to the issue before the jury that it is appropriate for the jury’s consideration. *See Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1391-92 (Fed. Cir. 2003) (applying Fifth Circuit law) (“When, as here, the parties’ experts rely on conflicting sets of facts, it is not the role of the trial court to evaluate the correctness of facts underlying one expert’s testimony.”); *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 249-50 (5th Cir. 2002) (“‘[t]he trial court’s role as gatekeeper [under Daubert] is not intended to serve as a replacement for the adversary system.’ . . . Thus, while exercising its role as a gate-keeper, a trial court must take care not to transform a *Daubert* hearing into a trial on the merits,” quoting Fed. R. Evid. 702 advisory committee note). As the Supreme Court explained in *Daubert*, 509 U.S. at 596, “Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *See Mathis v. Exxon Corp.*, 302 F.3d 448, 461 (5th Cir. 2002).

III. ANALYSIS

A. DR. GROEHN

Samsung argues that Dr. Groehn misuses his conjoint survey and analysis. First, Samsung argues that such an analysis is the incorrect tool to determine a dollar value. Second, Samsung contends Dr. Groehn’s correction demonstrates the particular analysis performed is unreliable. Third, Samsung argues battery life is too divorced from the patented technology to be useful here and that Dr. Groehn’s survey failed to adequately define the terms used in the survey to be useful.

On the first point, Samsung argues a conjoint survey is simply the wrong tool for finding incremental profit. Samsung contends such an analysis is not used by smartphone makers and Dr. Groehn's own cited sources provide that "conjoint analysis can only estimate demand. Conjoint survey data, alone, cannot be used to compute market equilibrium outcomes such as market prices." However, Samsung contends this is precisely what Dr. Groehn opines based on his conjoint survey. Samsung contends such a survey misses the nuances of the real market such as costs or competition and other real world market conditions.

Samsung further contends that these failings cannot be corrected by a regression calculation when the underlying survey is so divorced from the real market. Samsung again cites Dr. Groehn's own source that "[c]onjoint practitioners have chosen the unfortunate term 'market simulation to describe demand predictions based on conjoint analysis. These practices are not simulations of any market outcome and must be understood for their limitations..." and "[e]ven with existing products for which marketplace data is observed, there are many situations in which it is not possible to identify consumer preferences."

As a whole, Samsung contends this demonstrates that Dr. Groehn's analysis is not carefully tied to the claimed inventions' s footprint in the marketplace and should all be stricken.

Next, Samsung contends that Dr. Groehn's correction to "decoy" variables resulting in a doubling of incremental profits demonstrates the very problems discussed above. Dr. Groehn corrected variables related to the screen size variable that he included to determine the relative value of battery life. Dr. Groehn testified that he inadvertently included the values from an earlier case rather than the values he used in this action. Samsung contends that such a change in the variable that is not of interest resulting in a 2.3 times increase demonstrates the unreliability of Dr. Groehn's report and at the very least should be stricken for including mathematical errors and flawed data.

Samsung further complains that Dr. Groehn's focus on battery life is unacceptably divorced from the patented technology. Samsung points to *Fractus, S.A. v. Samsung*, No. 6:09-CV-203-LED-JDL, 2011 WL 7563820, (E.D. Tex. Apr. 29, 2011) where this Court excluded a conjoint analysis that did not distinguish between any internal antenna and the particular claimed internal antenna. Samsung contend the same is true here in that Dr. Groehn's survey considers the value of battery life but many different factors impact battery life and no expert accounts for that.

Samsung further argues that "battery life" and especially "standard" battery life have no objective meaning, thus rendering survey questions about the value of a 5% or 10% increase meaningless. Samsung contends both Dr. Groehn and Mr. Kennedy testified that "standard battery life" is different to every individual responding to the survey and simply based on individual expectations. Samsung contrasts this with the far more precise "decoy" features where he provides specific models or precise screen sizes.

Headwater responds that a conjoint survey and analysis can be used as the basis for deriving incremental profits, that Dr. Groehn's clerical error correction was entirely appropriate and not based on the decoy attributes, and Dr. Groehn's survey was sufficiently tied to the patented technology with a proper definition of "battery life."

Headwater contends Dr. Groehn, an expert in conjoint analysis, first performed a pilot survey to determine the "decoy" attributes to include in his full survey. Dr. Groehn's full conjoint survey then provided information on each attribute and defined "battery life" as "the length in time in hours that a device can operate under battery power after being fully charged." Headwater contends Dr. Groehn's "[c]onjoint analysis decomposes the holistic judgments of each survey respondent into a part-worth for each attribute level." Dr. Groehn then uses the "part-worths" to conduct a regression analysis. Headwater contends Dr. Groehn then applied this demand data in a monopolistic competition model to estimate incremental profits assuming optimization of profits and constant, low marginal costs. With all of this,

Headwater contends Dr. Groehn did not use *only* a conjoint analysis to derive incremental profits and did not run afoul of the cited authority.

Headwater further defends the “decoy” attributes chosen by Dr. Groehn. Headwater contends that the decoy variables having nothing to do with the patented technology are necessary for a clear comparison to the attributes of interest. Thus, Headwater contends Samsung’s complaint is misplaced.

Likewise, Headwater contends Dr. Groehn’s corrections relate to a data entry error and do not render the overall analysis faulty. Dr. Groehn testified that the prices he used were tied to real-world pricing. Headwater contends Dr. Groehn’s response data was always based on what was shown in the survey and it was only a clerical error in his calculations that changed.

Next, Headwater contends Dr. Groehn’s survey is sufficiently tied to the patented technology. Headwater contends Dr. Wesel separately performed testing to estimate the improvement in battery life specifically attributable to the accused functionality. Headwater contends Dr. Groehn then determines the value of battery life to consumers which Mr. Kennedy uses in combination with technical testing data to estimate Samsung’s profits attributable to the alleged infringement.

Last, Headwater contends Dr. Groehn sufficiently defined battery life in his survey as “the length in time in hours that a device can operate under battery power after being fully charged.” Headwater contends this user perception-based definition is acceptable as what is important is the user’s perception particularly where so many factors impact battery life.

Headwater presents the more persuasive argument. First, the Court is not convinced that Dr. Groehn has so misused the conjoint analysis tool as to be excludable. There is no rule that such an analysis is *per se* unreliable when used in this manner. *See Estech Sys. IP, LLC v. Carvana LLC*, Case No. 2:21-cv-0482, 2023 WL 2934920, at *3 (E.D. Tex. Apr. 13, 2023). Rather, the Court is satisfied that Dr. Groehn is sufficiently familiar with the use of conjoint surveys to be permitted to opine on them and their use,

leaving Samsung's complaint to go to weight, not admissibility.

Likewise, the Court is not convinced that Dr. Groehn's selection and ultimate correction to the decoy variables he used makes Dr. Groehn's analysis unreliable. The Court is satisfied that certain unpatented features need to be considered to determine a relative value of the at-issue attribute. It will be for cross-examination to test Dr. Groehn's choice of decoy variables. Likewise, while Dr. Groehn's correction is worthy of examination, it too goes to weight not admissibility. While mathematical errors in a report raise concerns, Samsung has not identified mathematical errors in the operative report. Thus, it is a question whether Dr. Groehn can be relied upon after admitting to an error that altered the damages amount by such a large factor. This is a credibility determination that the jury will be tasked with, not the Court.

The Court is further not convinced that Dr. Groehn's focus on battery life is inappropriate. Dr. Wesel provides sufficient testimony tying battery life to the asserted claims. While the Court in *Fractus* excluded a conjoint survey focused on internal antennas that did not distinguish between the claimed and unclaimed antenna because it failed to measure how consumers value the purported advantages provided by the patented technology, here Dr. Groehn's survey was specifically crafted to focus on the battery-saving advantages provided by the patented technology. While there are other technologies that can also improve battery life, that does not render Dr. Groehn's focus inappropriate. It will be for Mr. Kennedy, Dr. Wesel, and Samsung itself to explore how else battery life can be improved and the comparable benefit of the claimed invention.

Last, the Court finds that Samsung's concern about defining "battery life" is best left for cross-examination. Headwater has put forth a sufficient explanation for using its definition in this instance.

B. MR. KENNEDY

Samsung first makes similar arguments as to Mr. Kennedy, that his report improperly relies on Dr. Wesel and Dr. Groehn, that his correction demonstrates his analysis is improper, and his adjustments are inappropriate. Samsung further complains of Mr. Kennedy's reliance on a non-comparable license, improper recitation of hearsay, and application of a running royalty on future sales.

Samsung's first complaint is that Mr. Kennedy's damages analysis is not reliable. Samsung complains of Mr. Kennedy's reliance on both Dr. Wesel's technical opinions and testing data. Samsung contends that all of Dr. Wesel's testing analysis is flawed but also complains that Mr. Kennedy's opinions are improperly based on only one accused feature, Power Savings Mode, that Dr. Wesel tested and opined all features would perform similarly too. Next, Samsung contends Mr. Kennedy's reliance on Dr. Groehn is improper for the reasons discussed above.

Further, as with Dr. Groehn, Samsung contends that Mr. Kennedy's correction demonstrates his unreliability. Samsung is specifically concerned with Mr. Kennedy's analysis of the "upper bound" where he opined first that it was \$1.3 billion and then \$3.3 billion. Samsung contends that Mr. Kennedy was applying the same *Georgia-Pacific* factors but his "upper bound" royalty changed dramatically.

Samsung next contends that Mr. Kennedy's apportionment adjustments are not tied to the facts of the case. In particular, Mr. Kennedy applies apportionment based on SG&A Adjustment, R&D Adjustment and a bargain range adjustment. Samsung contends the first two are derived from Samsung's company wide numbers and thus have nothing to do with the devices or technology at issue. Samsung contends that the latter is simply unreliable as it gives Headwater the greater bargaining power.

Samsung also complains about the comparability of a Headwater-ItsOn license agreement. Samsung contends that while it is a license to the asserted patents, it is not comparable as it is not an arms-length agreement. In particular, Samsung notes the same individual signed the agreement for both parties. From this, Samsung contends it has no relevance to the damages case.

Next, Samsung contends that, in his report, Mr. Kennedy recites various Samsung internal documents referring to “battery life” to support its importance. Samsung contends Mr. Kennedy merely parrots the documents but the documents never discuss the accused features. Samsung asks the Court to prevent Mr. Kennedy from merely repeating these documents because it would be an improper under FRE 703.

Last, Samsung contends Mr. Kennedy improperly addresses future damages. Samsung contends Mr. Kennedy calculates a reasonable royalty for future infringement but that is not proper since no such infringement has yet occurred and indeed may not occur. Specifically, Samsung contends Mr. Kennedy offers a running royalty discussed as a lump sum to provide a running royalty from 2024 to 2030.

Headwater responds that it is entirely proper for Mr. Kennedy to rely on Dr. Wesel and Dr. Groehn. Headwater contends Mr. Kennedy does more than merely parrot the other experts and instead uses them to support his own opinions.

Headwater further contends the parties would negotiate to split the benefit. Headwater contends that Dr. Wesel opines that there are no non-infringing alternatives and that based on this, Mr. Kennedy contends Headwater would have significant bargaining power. Headwater contends the SG&A Adjustment and R&D Adjustment are supported by academic studies and are specific to what Samsung would have been willing to pay.

As to the Headwater-ItsOn license, Headwater contends that Mr. Kennedy accounts for the non-comparable elements. Headwater contends that as the license is technically comparable, relying on Dr. Wesel. Then, Headwater contends Mr. Kennedy accounts for the non-comparable economic aspects such as that the license was not negotiated as an arms-length contract. In particular, Headwater contends ItsOn and Headwater diverged over time and entered into certain amendments accounting for that divergence. Headwater contends Mr. Kennedy focuses on the last amendment.

Next, Headwater argues that the documents Mr. Kennedy recites are not hearsay and are relevant to the importance of battery life. Headwater contends the documents are business records and party admissions. Headwater contends the documents detail Samsung's competitive failures related to poor battery life and are dated just before the hypothetical negotiation date. Headwater further contends that Samsung's relevant witness testified that they are kept in the normal course of business and would thus qualify under the business record exception.

Last, Headwater contends Mr. Kennedy's further damages analysis was made in response to Samsung's contention that future damages should be awarded under a lump sum reasonable royalty. Headwater contends it expected Samsung to argue for a lump sum royalty but that it would downplay the extent of infringement so Mr. Kennedy countered this in advance.

First, the Court does not find Mr. Kennedy's reliance on the other Headwater experts problematic. As provided above, the Court finds the underlying opinions of both experts sufficiently reliable to be presented to the jury. Mr. Kennedy will be permitted to offer opinions incorporating the underlying opinions of both experts.

Next, the correction submitted by Mr. Kennedy does not render his opinion unreliable. Again, the operative report is the corrected report. Samsung is free to argue that the differences between the reports suggest that Mr. Kennedy is merely parroting whatever opinions support the damages number Headwater prefers rather than properly analyzing the information, but that is a question of credibility for the jury.

Likewise, Mr. Kennedy's apportionment is sufficiently tied to the facts of the case. While Mr. Kennedy's apportionment opinions on SG&A and R&D adjustments are derived from company-wide values rather than something more precise, it is within the purview of an expert to opine from the best available evidence rather than perfect evidence. The Court sees no reason to find company-wide valuations for SG&A and R&D cannot inform an expert as to a particular business unit. Likewise, Mr. Kennedy has

adequately explained his basis for opining that Headwater has the greater bargaining position based on the availability of non-infringing alternatives.

As to allegedly hearsay documents, the Court finds that these documents are the kind that a damages expert is expected to rely upon. It is entirely within the purview of a damages expert to opine on documents that show the alleged infringer's valuation of relevant attributes that the expert bases the valuation upon. Here, while the documents may not directly relate to the accused feature, such as the power saving mode, they do relate to the basis of Mr. Kennedy's valuation, battery life. Thus, Mr. Kennedy will be permitted to rely upon these documents.

However, the Court agrees with Samsung that Mr. Kennedy cannot offer to the jury an opinion on a running royalty based on post-trial sales. While a lump sum reasonable royalty analysis can take into account expected sales that would occur after the trial, *see Finesse Wireless LLC v. AT&T Mobility LLC*, 2023 WL 5612448, at *3(E.D. Tex. Aug. 30, 2023), that is not what Mr. Kennedy appears to be proposing here. Plaintiff is free to criticize Defendant's lump sum royalty analysis on the basis that it fails to take into account the full measure of Defendant's expected use of the patented technology, including post-trial use, but the schedules attached to Mr. Kennedy's report appear to be simply calculating a running royalty out beyond the trial date for the full life of the patents. A lump sum royalty analysis must be considered from the perspective the hypothetical negotiation, not performed only on the post-trial sales. *See Netlist, Inc. v. Micron Tech., Inc.*, No. 2:22-CV-203-JRG-RSP, 2024 WL 326563, at *4 (E.D. Tex. Jan. 27, 2024). Thus, the Court strikes any running royalty analysis on future sales from Mr. Kennedy's report.

IV. CONCLUSION

For the reasons provided above, the Daubert Motion and Motion to Strike Expert Testimony of Dr. Andreas Groehn (**Dkt. No. 251**) is **DENIED**, and the Daubert Motion and Motion to Strike Expert

Testimony of Mr. David Kennedy. (**Dkt. No. 252**) is **GRANTED** to the extent of any running royalty analysis on post-trial sales, and otherwise denied.

SIGNED this 7th day of November, 2024.



ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE